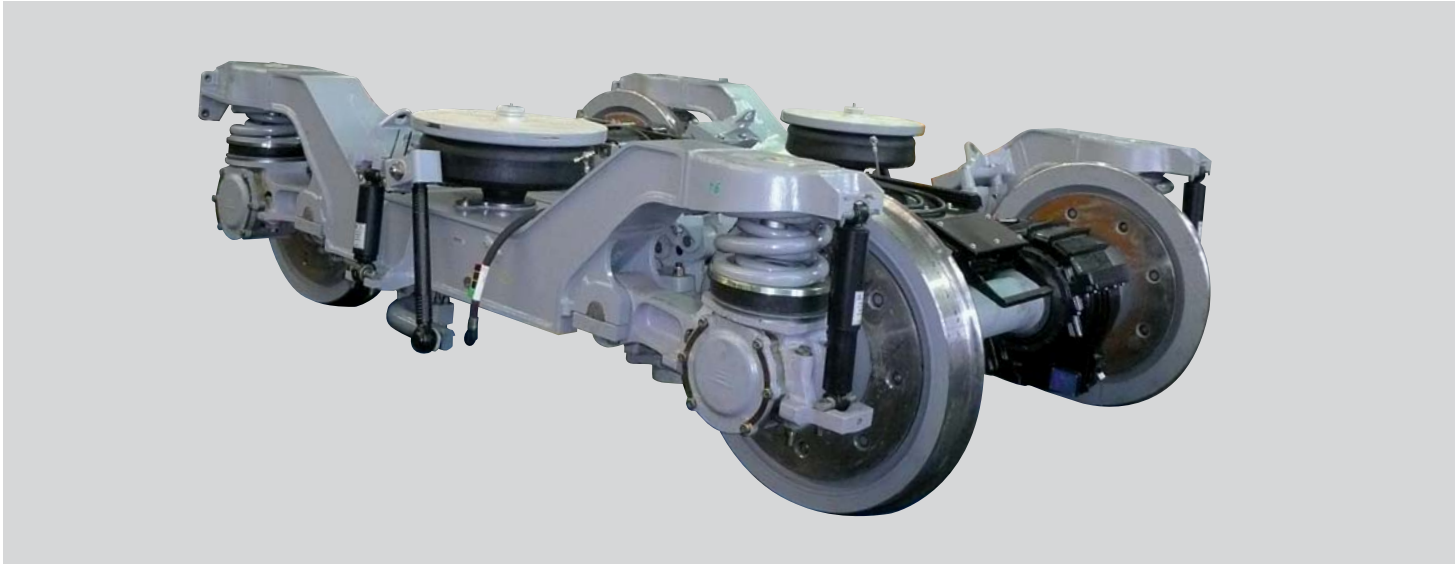


M-Size Bogies

◁ FLEXX Metro 3000

Delhi application ▷



This application of the **BOMBARDIER* FLEXX* Metro 3000** bogie design reflects the existing infrastructure and the operational requirements of Delhi Metro Rail Corporation (DMRC). The bogies will be fitted to **BOMBARDIER* MOVIA*** metro vehicles.

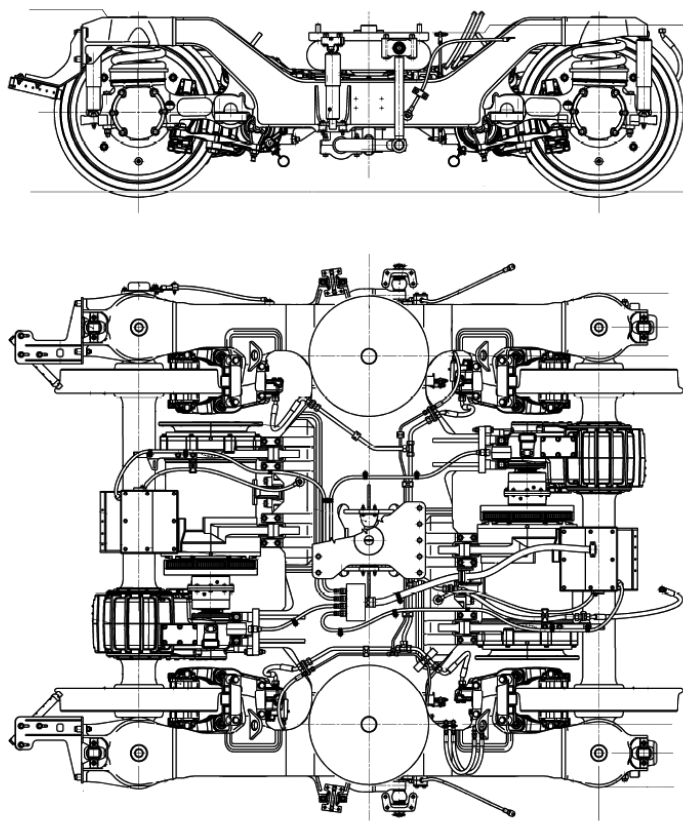
The **FLEXX Metro 3000** Delhi type bogie is based on the well proven MTRC bogie design configured for the Mass Transit Railway Corporation Limited (MTRCL) of Hong Kong in China. Both bogies have been developed from the well proven **FLEXX Series 3** bogie. There are over 8,000 **FLEXX Series 3** bogies in operation worldwide. This explains why this bogie was chosen for vehicles of the DMRC.

The Delhi application bogie features a robust fabricated frame. The swing arm axle guidance with coil spring primary suspension and elastomeric cushion, gives a high level of steering performance yet low noise emission. Full advantage has been taken of the principle of fitting standard components and frame modules. This results in a bogie with a proven pedigree and low life cycle costs.



Artistic rendering, **MOVIA** train, DMRC, Delhi, India

680 bogies were ordered by Delhi Metro Rail Corporation in July 2007. This base order was followed by a second one for 168 units in 2008. After the first bogies are manufactured in Siegen, Germany, the serial production will take place at the Bombardier Site in Savli, India.



Characteristics

Welded H shape frame

Primary and secondary suspension systems optimised for safety, stability and ride comfort for passengers

Swing arm axle guidance with coil spring primary suspension and elastomeric cushion, giving a high level of steering performance as well as low noise emission

High comfort secondary suspension comprising airsprings and auxiliary elastomeric spring

Air orifice secondary vertical damping reduces weight, cost and complexity and improves vertical ride quality

Frame mounted Anti-Roll bar connected to the car body by vertical links

Transom mounted traction motors coupled to axle mounted gearboxes

Braking is by wheel mounted brake discs with frame mounted actuators for both service and parking applications

Axle end mounted Wheel Slide Protection sensors to optimise braking performance and reduce wheel damage

Elastomer bushes used throughout to minimise noise transmission and reduce maintenance

Technical Data

Gauge	1,673 mm
Wheel base	2,500 mm
Wheel diameter new	860 mm
Wheel diameter worn	780 mm
Operating speed	85 km/h
Mass (trailer)	8.5 (6.1) t
Maximum axle load	17 t
Pivot load	27,9 t
Height over secondary suspension	860 mm
Power	2 x 220 kW

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